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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
GUILL, RUSSELL L	

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/042,294	BEN-DAVID, SHOHAM	
	Examiner	Art Unit	
	Russell L. Guill	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☒ Claim(s) *3,6,8,14,20,23,25,31,37,40,42 and 48* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *11 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/10/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 - 51 have been examined. Claims 1 - 51 have been rejected.

Specification

2. The disclosure is objected to because of the following informalities:

   2.1. On page 9, line 27, the sentence appears to be incomplete.

   2.2. On page 16, lines 9, the first word is "in", and it appears that it should be "it".

Claim Objections

3. **Claims 3, 20 and 37** are objected to because of the following informalities: The claims recite "the sequence of events". Reference to the previous limitation should remain consistent to avoid any possible confusion or antecedent issues. It appears that the sequence refers to the "specified sequence" in a previous claim. Appropriate correction is required.

4. **Claim 6, 23 and 40** are objected to because of the following informalities: The claims recite "the events in the sequence". Reference to the previous limitation should remain consistent to avoid any possible confusion or antecedent issues. It appears that the sequence refers to the "specified sequence" in a previous claim. Appropriate correction is required.

5. **Claims 8, 25 and 42** are objected to because of the following informalities: The claims recite "the sequence of the events". Reference to the previous limitation should remain consistent to avoid any possible confusion or antecedent issues. It appears that the sequence refers to the "specified sequence" in a previous claim. Appropriate correction is required.

6. **Claims 14, 31 and 48** are objected to because of the following informalities: The claims recite "the at last one target state". It appears to mean "at least one target state". Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

   The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7.1. **Claims 1, 18 and 35** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

7.1.1. The claims indicate that a specified sequence of events is to occur on a specified path, however, the specification appears to disclose only that the specified sequence of events needs to occur, but not necessarily on a specified path. The word "path" conveys the meaning that one event is connected to a following event through a chain of intermediate events. It appears that the specified events are allowed to occur on different paths.

7.1.2. The claims indicate computing successive reachable sets such that in the successive reachable sets the events occur in the specified sequence, however the specification appears to disclose only computing successive reachable sets, with no constraint that events occur in a specified sequence.

7.2. **Claims 13, 30 and 47** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims indicate that all the events occur along the trace in a specified sequence, however, the specification appears to disclose only that the specified sequence of events needs to occur, but not necessarily on a specified path. It appears that the specified events are allowed to occur on different paths.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

8.1.1. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8.2. **Claims 11, 28 and 45** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite, "choosing the predecessor state in the initial set to the state in the first set". The phrase appears to be incomplete. For the purpose of claim examination, the phrase is interpreted as "choosing the predecessor state in the initial set to be the state in the first set". Correction or amendment is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1 - 3, 6 - 20, 23 - 37 and 40 - 51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beer (Beer, Ilan; Ben-David, Shoham; Eisner, Cindy; Landver, Avner; "RuleBase: An Industry-Oriented Formal Verification Tool", art provided by the Applicant), in view of Bruegge (Bruegge, Bernd; Hibbard, Peter; "Generalized Path Expressions: A High Level Debugging Mechanism", March 1983, Proceedings of the symposium on High-level debugging, Volume 8, 18 Issue 4), further in view of Ball (Ball, Thomas; Larus, James R.; "Optimally Profiling and Tracing Programs", ACM Transactions on Programming Languages and Systems (TOPLAS), July 1994, Volume 16 Issue 4).

10.1. Regarding claim 1:

10.1.1. Beer appears to teach:

10.1.1.1. A method for checking a model, which defines states of a system under study and a transition relation among the states **(First page, sections Abstract and Introduction)**.

10.1.1.2. beginning from the initial set, computing successive reachable sets comprising the states of the system that are reachable from the initial set along the specified path, such that in the successive reachable sets the events occur in the specified sequence **(First page, section Introduction, especially the third paragraph that starts with, "Rulebase uses an enhanced version of SMV . . ."; it would have been obvious that there is an initial set of states to begin; also, the model checking system generates reachable states which includes the states of the system that are reachable from the initial set along the specified path, such that in the successive reachable sets the events occur in the specified sequence, <u>if the states exist, but is not limited to only those states on the specified path, especially if the path does not exist</u>)**.

10.1.2. determining whether an intersection exists between one of the reachable sets and a target set <u>(second page, section 2.4 Debugging; it would have been obvious that theformulas in the specification is a target set</u>); and

10.1.3. when the intersection is not found to exist, producing a trace between the at least one initial state and a termination state in which at least one of the specified events occurs <u>(second page, section 2.4</u>

Debugging, first paragraph; it would have been obvious that when a formula in the specification passes, that it is a specified event).

10.1.4. Beer does not specifically teach:

10.1.4.1. determining whether an intersection exists between one of the reachable sets on the specified path and the target set; and

10.1.4.2. when the intersection is not found to exist, producing a partial trace along the specified path between the at least one initial state and a termination state in which at least one of the specified events occurs.

10.1.5. Bruegge appears to teach:

10.1.5.1. specifying a path to be traversed through the states of the system under study from an initial set that comprises at least one initial state among the states of the system to a target set that comprises at least one target state among the states of the system, such that a specified sequence of events is to occur on the specified path between the at least one initial state and the at least one target state (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; it would have been obvious that states of a system are states of a piece of software; and page 36, section 3 Path Rules);

10.1.5.2. determining whether an intersection exists between one of the reachable sets on the specified path and the target set (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules).

10.1.5.3. a specified path between the at least one initial state and a termination state in which at least one of the specified events occurs (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36, the path expression with an initial state "Open" and a termination state "Close"; and page 36, section 3 Path Rules).

10.1.6. Ball appears to teach:

10.1.6.1. producing a partial trace along a path between an initial state and a termination state (page 1338, section 4 Program Tracing; it would have been obvious that a trace is produced even if the program terminates before a valid termination state is reached).

10.1.7. The motivation to use the art of Bruegge with the art of Beer would have been the benefit recited in Bruegge that a reporting mechanism for debugging can be invoked very selectively, thus avoiding the

need for the user to analyze and filter large volumes of output (page 34, section 1 Introduction, second paragraph).

10.1.8. The motivation to use the art of Ball with the art of Beer would have been the benefit recited in Ball that the paper studies algorithms for efficiently tracing programs, which would have been valuable for state tracing in a model checker (page 1358, section 8 Conclusions).

10.1.9. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Bruegge and Ball with the art of Beer to produce the claimed invention.

10.2. **Regarding claim 2:**

10.2.1. Bruegge appears to teach that specifying the path comprises defining the events in terms of transitions among the states of the system under study (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules; the example path expression defines transitions between states open, read, write, and close).

10.3. **Regarding claim 3:**

10.3.1. Bruegge appears to teach that defining the events comprises defining the transitions such that in the sequence of events, at least two consecutive transitions are separated by more than one cycle of the transition relation (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules; it would have been obvious that the example path expression does not require the state transitions to be in immediate sequence).

10.4. **Regarding claim 6:**

10.4.1. Bruegge appears to teach detecting occurrence of the events in the sequence (page 36, section 3 Path Rules).

10.5. **Regarding claim 7:**

10.5.1. Bruegge appears to teach informing a user upon detecting occurrence of the events (page 38, left-side column, the expression "Value I" is written in the debugger which informs a user when an occurrence of an event is detected).

10.6. **Regarding claim 8:**

10.6.1. Bruegge appears to teach choosing the termination state to be one of the states in which a final event occurs in the sequence of the events whose occurrence has been detected (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules; if the termination state of "close" is a final event, then it occurs in the sequence of events).

10.7. **Regarding claim 9:**

10.7.1. Beer appears to teach:

10.7.1.1. determining a first set among the reachable sets, disjoint from the initial set, such that all of the states in the first set are reached from the initial states in a first cycle of the transition relation (First page, section Introduction, especially the third paragraph that starts with, "Rulebase uses an enhanced version of SMV . . ."; it would have been obvious that SMV performs the limitation); and

10.7.1.2. determining the successive reachable sets, following the first set, such that all the states in each of the sets are reached from the states in the preceding set in a successive cycle of the transition relation, and so that each of the sets is disjoint from the initial set and from the other sets determined before it relation (First page, section Introduction, especially the third paragraph that starts with, "Rulebase uses an enhanced version of SMV . . ."; it would have been obvious that SMV performs the limitation).

10.8. Regarding claim 10:

10.8.1. Bruegge appears to teach selecting one of the states from each of at least some of the successive reachable sets (pages 35 – 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules; it would have been obvious that the states in the path expression are selected from successive sets of reachable states in the program).

10.9. Regarding claim 11:

10.9.1. Beer appears to teach choosing a predecessor state among the states in the preceding set until the state on the trace in the first set is found, and choosing the predecessor state in the initial set to the state in the first set (First page, section Introduction, especially the third paragraph that starts with, "Rulebase uses an enhanced version of SMV . . ."; it would have been obvious that SMV performs the limitation)

10.10. Regarding claim 12:

10.10.1. Beer appears to teach that when it is determined that the intersection exists between the target set and one of the reachable sets, producing a complete trace from the at least one target state through the states in the reachable sets to the at least one initial state (section 2.4 Debugging, second paragraph; it would have been obvious that to analyze positive results that a trace is produced).

10.11. Regarding claim 13:

10.11.1. Beer appears to teach computing the trace so that all the events occur along the trace in the specified sequence (section 2.4 Debugging, second paragraph; it would have been obvious that to analyze positive results that a trace is produced in the specified sequence).

10.12. **Regarding claim 14:**

10.12.1. Bruegge appears to teach specifying a property to be fulfilled by the at last one target state (pages 35 - 36; last partial sentence on page 35 through first paragraph on page 36; and page 36, section 3 Path Rules; it would have been obvious that when the "Close" statement is executed, that it fulfills a property "Close statement is executed").

10.13. **Regarding claim 15:**

10.13.1. Beer appears to teach specifying a condition that is expected to be true over all of the reachable states of the system under study, and wherein the condition is false in the at least one target state (section 2.4 Debugging, first paragraph).

10.14. **Regarding claim 16:**

10.14.1. Beer appears to teach specifying a condition representing a desired behavior of the system under study, such that the condition is fulfilled in the at least one target state (section 2.4 Debugging, second paragraph).

10.15. **Regarding claim 17:**

10.15.1. Beer appears to teach testing the property while computing the sets, and ceasing to compute the sets when the intersection is found to exist (section 2.4 Debugging, first paragraph; it would have been obvious that the property is tested while computing sets, and that sets would not be computed after the intersection is found).

10.16. **Regarding claim 18:**

10.16.1. Claim 1 above teaches most of the limitations of claim 18. The differences are taught below.

10.16.2. Beer appears to teach a model checking apparatus comprising a model processor (first page, Abstract and Section 1 Introduction, and third page, figure 1; it would have been obvious that the RuleBase tool was a computer tool comprising a processor to process a model).

10.16.3. The motivation to use the art of Bruegge with the art of Beer would have been the benefit recited in Bruegge that a reporting mechanism for debugging can be invoked very selectively, thus avoiding the need for the user to analyze and filter large volumes of output (page 34, section 1 Introduction, second paragraph).

10.16.4. The motivation to use the art of Ball with the art of Beer would have been the benefit recited in Ball that the paper studies algorithms for efficiently tracing programs, which would have been valuable for state tracing in a model checker (page 1358, section 8 Conclusions).

10.16.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Bruegge and Ball with the art of Beer to produce the claimed invention.

10.17. **Regarding claim 19**, the claim is taught as in claim 2 above.

10.18. **Regarding claim 20**, the claim is taught as in claim 3 above.

10.19. **Regarding claim 23**, the claim is taught as in claim 6 above.

10.20. **Regarding claim 24**, the claim is taught as in claim 7 above.

10.21. **Regarding claim 25**, the claim is taught as in claim 8 above.

10.22. **Regarding claim 26**, the claim is taught as in claim 9 above.

10.23. **Regarding claim 27**, the claim is taught as in claim 10 above.

10.24. **Regarding claim 28**, the claim is taught as in claim 11 above.

10.25. **Regarding claim 29**, the claim is taught as in claim 12 above.

10.26. **Regarding claim 30**, the claim is taught as in claim 13 above.

10.27. **Regarding claim 31**, the claim is taught as in claim 14 above.

10.28. **Regarding claim 32**, the claim is taught as in claim 15 above.

10.29. **Regarding claim 33**, the claim is taught as in claim 16 above.

10.30. **Regarding claim 34**, the claim is taught as in claim 17 above.

10.31. **Regarding claim 35**:

10.31.1. Claim 1 above teaches most of the limitations of claim 35. The differences are taught below.

10.31.2. Beer appears to teach a computer software product comprising a computer readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to execute (first page, Abstract and Section 1 Introduction, and third page, figure 1; it would have been obvious that the RuleBase tool was a computer software product comprising a computer readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to execute).

10.31.3. The motivation to use the art of Bruegge with the art of Beer would have been the benefit recited in Bruegge that a reporting mechanism for debugging can be invoked very selectively, thus avoiding the need for the user to analyze and filter large volumes of output (page 34, section 1 Introduction, second paragraph).

10.31.4. The motivation to use the art of Ball with the art of Beer would have been the benefit recited in Ball that the paper studies algorithms for efficiently tracing programs, which would have been valuable for state tracing in a model checker (page 1358, section 8 Conclusions).

10.31.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Bruegge and Ball with the art of Beer to produce the claimed invention.

10.32. Regarding claim 36, the claim is taught as in claim 2 above.

10.33. Regarding claim 37, the claim is taught as in claim 3 above.

10.34. Regarding claim 40, the claim is taught as in claim 6 above.

10.35. Regarding claim 41, the claim is taught as in claim 7 above.

10.36. Regarding claim 42, the claim is taught as in claim 8 above.

10.37. Regarding claim 43, the claim is taught as in claim 9 above.

10.38. Regarding claim 44, the claim is taught as in claim 10 above.

10.39. Regarding claim 45, the claim is taught as in claim 11 above.

10.40. Regarding claim 46, the claim is taught as in claim 12 above.

10.41. Regarding claim 47, the claim is taught as in claim 13 above.

10.42. Regarding claim 48, the claim is taught as in claim 14 above.

10.43. Regarding claim 49, the claim is taught as in claim 15 above.

10.44. Regarding claim 50, the claim is taught as in claim 16 above.

10.45. Regarding claim 51, the claim is taught as in claim 17 above.

11. Claims 4, 5, 21, 22, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beer in view of Bruegge, further in view of Ball as applied to claims 1 - 3, 6 - 20, 23 - 37 and 40 - 51, above, and further in view of BeerRCTL (Beer, Ilan; Ben-David, Shoham; Landver, Avner; "On-the-fly model checking of the RCTL Formulas", 1998, art provided by the Applicant on the Information Disclosure Statement).

11.1. Beer as modified by Bruegge and Ball teaches the method for checking a model which defines states of a system under study and a transition relation among the states, as recited in claims 1 - 3, 6 - 20, 23 - 37 and 40 - 51 above.

11.2. Regarding claim 4:

11.2.1. Beer does not specifically teach that computing the successive reachable sets comprises building a non-deterministic automaton based on the transitions, and computing the reachable sets using the automaton.

11.2.2. BeerRCTL appears to teach that computing the successive reachable sets comprises building a non-deterministic automaton based on the transitions, and computing the reachable sets using the automaton (first page, section 1 Introduction, first paragraph; and second page, second paragraph; it would have been obvious that the reachable sets were computed using the finite state automaton).

11.2.3. The motivation to use the art of BeerRCTL with the art of Beer, Bruegge and Ball would have been the benefit recited in BeerRCTL that RCTL is easy to use, and has a large subset that can be verfied on the fly (second page, second paragraph that begins with "Even though the original . . . ").

11.2.4. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BeerRCTL with the art of Beer, Bruegge and Ball to produce the claimed invention.

11.3. Regarding claim 5:

11.3.1. BeerRCTL appears to teach that building the non-deterministic automaton comprises defining Boolean conditions corresponding respectively to the transitions (first page, section 1 Introduction, first paragraph; it would have been obvious that building a state machine defines Boolean conditions), and wherein detecting the occurrence of the events comprises testing the Boolean conditions (second page, second paragraph that begins with "Even though the original . . . ").

11.4. Regarding claim 21:

11.4.1. Claim 21 is taught as in claim 4 above.

11.4.2. The motivation to use the art of BeerRCTL with the art of Beer, Bruegge and Ball would have been the benefit recited in BeerRCTL that RCTL is easy to use, and has a large subset that can be verfied on the fly (second page, second paragraph that begins with "Even though the original . . . ").

11.4.3. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BeerRCTL with the art of Beer, Bruegge and Ball to produce the claimed invention.

11.5. Regarding claim 22, the claim is taught as in claim 5 above.

11.6. Regarding claim 38:

11.6.1. Claim 38 is taught as in claim 4 above.

11.6.2. The motivation to use the art of BeerRCTL with the art of Beer, Bruegge and Ball would have been the benefit recited in BeerRCTL that RCTL is easy to use, and has a large subset that can be verfied on the fly (second page, second paragraph that begins with "Even though the original . . . ").

11.6.3. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BeerRCTL with the art of Beer, Bruegge and Ball to produce the claimed invention.

11.7. **Regarding claim 39,** the claim is taught as in claim 5 above.

Conclusion

12. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.
13. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure:

13.1. Kidd, Marie-Elena C.; "Ensuring critical event sequences in high consequence computer based systems as inspired by path expressions", International Conference and Workshop on Engineering of Computer-Based Systems, 1997, Proceedings, 24-28 March 1997

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday - Friday 9:00 AM - 5:30 PM.
15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russ Guill
Examiner
Art Unit 2123

RG

Paul L. Rodriguez 9/19/05

Primary Examiner
Art Unit 2125